

# **A STUDY ON THE PREVALENCE OF SUBCLINICAL HYPOTHYROIDISM AMONG PREGNANT WOMEN**

## **ABSTRACT**

### **INTRODUCTION**

Subclinical hypothyroidism (SCH) is the commonest form of hypothyroidism in pregnancy. SCH is present, when the thyroid-stimulating hormone (TSH) is high but the thyroxine (T4) level is in the normal or low normal range. It is more common in South Asia.

The prevalence of SCH varies greatly and could be anticipated to be between 2% and 5% of women screened and an estimated prevalence of 2-3% and 0.3-0.5% for subclinical and overt hypothyroidism, respectively in Western countries, depending on the TSH and free T4 (FT4) level thresholds applied and this implies most women who would be identified with thyroid deficiency through routine screening. It seems that prevalence of hypothyroidism is more in Asian countries compared with the West.

Studies have evaluated the adverse effects of hypothyroidism on pregnancy for more than 50 years, and early studies provided clear evidence of a relation between overt hypothyroidism and adverse events. Other studies have confirmed that gestational hypertension, pre-eclampsia, increased placental weight, cretinism, low birth weight, foetal death, spontaneous abortion, and intrauterine growth retardation are all associated with overt hypothyroidism in pregnancy.

### **AIM THE STUDY**

1. To access the prevalence of Subclinical Hypothyroidism in antenatal mothers.
2. To access the maternal outcomes of antenatal mothers with subclinical Hypothyroidism
3. To access the perinatal outcomes in children born to mothers with subclinical Hypothyroidism

## **MATERIALS AND METHODS**

### **STUDY DESIGN**

This is a prospective observational study which was conducted in the Institute of Social Obstetrics, Kasthurba Gandhi Hospital, Chennai. The study was approved by the ethical committee of the institution.

### **STUDY PERIOD**

The study was conducted in the Institute of Social Obstetrics from June 2014 to April 2015.

### **STUDY POPULATION**

The study was conducted in antenatal women who attended the outpatient clinic and were admitted in the ward at ISO KGH Chennai during the above mentioned period. A total of 217 patients were included in the study who satisfied the inclusion and exclusion criteria.

### **CONCLUSION**

The prevalence of subclinical hypothyroidism was 12% in this study 11.5% of patients had gestational hypertension and 11.52% had severe anaemia. 6.55% of babies have low APGAR (less than 7), 8.93% of babies had intra uterine growth retardation, 10.71% of babies had respiratory distress syndrome. 0.9% patients had eclampsia, 9.5% had pre eclampsia, 4% had abruption of placenta, 8.2% had oligohydramnios, and 9.2% had post partum haemorrhage. There was no maternal or perinatal mortality in this study. Subclinical hypothyroidism was significantly associated with Gestational hypertension, preeclampsia, Abruption of placenta, oligohydramnios, low birth weight, and preterm deliveries. Subclinical hypothyroidism was not statistically associated with post partum haemorrhage, low APGAR, IUGR and respiratory distress

### **KEY WORDS :**

Subclinical Hypothyroidism, Pregnant women, eclampsia, preeclampsia, abruption, oligohydramnios, post partum haemorrhage.